

Intel® Server System S7000FC4UR

Power Cord Enabling Specification

Revision 1.0

January, 2007

Enterprise Platforms and Services Division - Marketing

Revision History

Date	Revision Number	Modifications
January, 2007	1.0	Initial release.

Disclaimers

Information in this document is provided in connection with Intel® products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not intended for use in medical, life saving, or life sustaining applications. Intel may make changes to specifications and product descriptions at any time, without notice.

Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them.

The Intel® Server System S7000FC4UR may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Intel, Pentium, Itanium, and Xeon are trademarks or registered trademarks of Intel Corporation.

*Other brands and names may be claimed as the property of others.

Copyright © Intel Corporation 2007. All rights reserved.

Table of Contents

1. Introduction	1
2. Power Cord Specifications.....	1
2.1 1570 Watt Power Supply Specifications	1
2.2 Cord and Service	2
3. Power Supply Cordsets	2
3.1 North American Power Supply Cordsets	2
3.2 European Power Supply Cordsets.....	4
3.3 Chinese Power Supply Cordsets	6
3.4 United Kingdom Power Supply Cordsets.....	8

< This page intentionally left blank. >

1. Introduction

This document helps customers procure power cords for the Intel® Server System S7000FC4UR.

This information is available for each power cord by geographical region:

- Component description and function
- Part numbers and revision levels
- Vendor contact information

2. Power Cord Specifications

The Intel® Server System S7000FC4UR does not include power cordsets for the two 1570-watt power supplies because of the unique requirements and differing AC services in regions where the system may be shipped.

The maximum input/output power expectations of the server system are:

- System power input: 80% efficiency at 90-240 VAC
- System power output: 1570 Watt

2.1 1570 Watt Power Supply Specifications

The AC input specifications of the 1570-watt power supply are:

Parameter	Minimum	Nominal	Maximum	Unit
Input Voltage (Low Line)	90	100-127	140	VAC _{rms}
Input Voltage (High Line)	180	200-240	264	VAC _{rms}
Input Current (90VAC)			14.4	A _{rms}
Input Current (103.5VAC)			14.4	A _{rms}
Input Current (180VAC)			11.1	A _{rms}

The AC inlet connector is an IEC320 C14 receptacle (rated for 15A, 250VAC).

2.2 Cord and Service

The following criteria should be used for the wire cord and AC service selection for the Intel® Server System S7000FC4UR. Verified your selection for the safety requirements of each application with a certified safety and regulatory professional.

- In North America, the cord must be UL Listed/CSA Certified, 16/3, type SJT/SO, with NEMA 6-15P or equivalent attachment plug and IEC 320 C13 plug outlet.
- Outside of North America, the cord must be flexible VDE certified or HAR rated 250V, 3 x 1mm minimum conductor size with IEC 320 C13 outlet, and rated for no less than the product ratings. The AC wall attachment plug shall be a three conductor grounding type, rated at 125% of the total input current rating and must be for the configuration of the specific region or country. The AC wall attachment plug must bear at least an accepted safety agency certification mark for the specific region or country.
- The cord must be no longer than 4.5 meters (14.76 feet).
- Do not attempt to modify or use an AC power cord that is not the exact type required.

3. Power Supply Cordsets

The vendor information below helps you identify a supplier for a suitable power cordset. The selections are assembled cordsets, not raw parts. Check your power source electrical outlets to determine suitability and verify the safety requirements of each application with a certified safety and regulatory professional.

3.1 North American Power Supply Cordsets

Table 1. Interpower Corporation North American Cordset

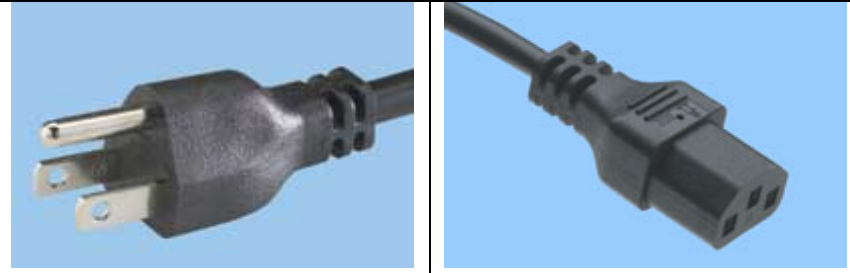
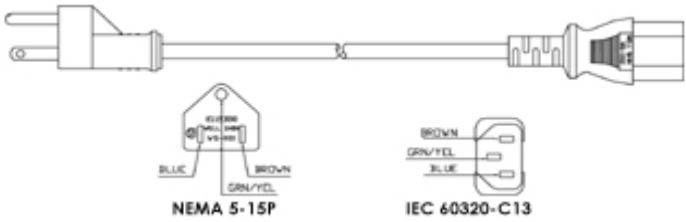
Part Number	86221590
Contact Telephone Number	1-800-662-2290
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C13
Supply End	NEMA 5-15
Current Rating	15 A
Voltage Rating	125 VAC
Length	2.5 meters
	

Table 2. Quail Electronics North American Cordset

Part Number	5041.072
Contact Telephone Number	1-925-373-6700
Vendor Website	http://www.quail.com/
Equipment End	IEC 60320 C13
Supply End	NEMA6-15P
Current Rating	15 A
Voltage Rating	125 VAC
Length	6 feet



The diagram illustrates a 6-foot power cord. The left end features a NEMA 6-15P plug, which is a three-pronged plug with a grounding pin. The right end features an IEC 60320 C13 connector, which is a standard three-pin connector for power supplies. Below the main diagram, two detailed views are provided: the NEMA 5-15P plug with color-coded wires (Blue, Green/Yel, Brown) and the IEC 60320-C13 connector with color-coded wires (Brown, Green/Yel, Blue).

3.2 European Power Supply Cordsets

Table 3. Interpower Corporation Continental Europe Cordset

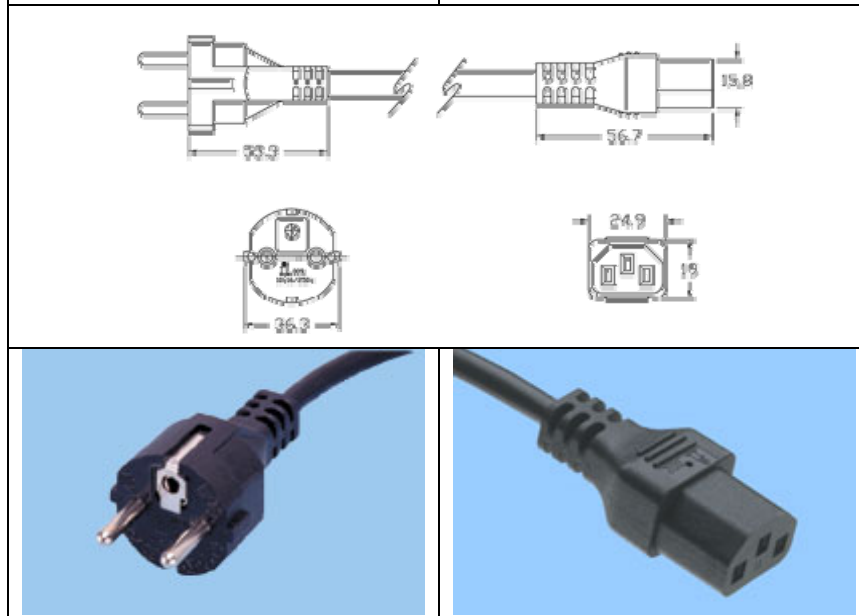
Part Number	86231530
Contact Telephone Number	44 (0) 1908 327700
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C13
Supply End	CEE 7/7
Current Rating	10 A
Voltage Rating	250 VAC
Length	3.5 meters
	

Table 4. Quail Electronics Continental Europe Cordset

Part Number	8500.098
Contact Telephone Number	011-1-800-669-8090
Vendor Website	http://www.quail.com/
Equipment End	IEC 60320 C13
Supply End	CEE 7/7 (Schuko)
Current Rating	10 A
Voltage Rating	250 VAC
Length	2.5 meters

The diagram illustrates the internal wiring of the power cord. On the left, the CEE 7/7 European Plug (Schuko) is shown with its internal terminals. The wiring is color-coded: Brown (Line), Green/Yellow (Ground), and Blue (Neutral). On the right, the IEC 60320-C13 connector is shown with its internal terminals, also color-coded: Brown (Line), Green/Yellow (Ground), and Blue (Neutral).

CEE 7/7 European Plug
"Schuko"

IEC 60320-C13

3.3 Chinese Power Supply Cordsets

Table 5. Interpower Corporation Chinese Cordset

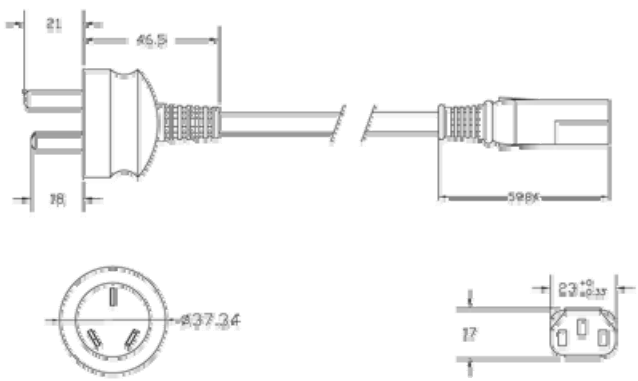
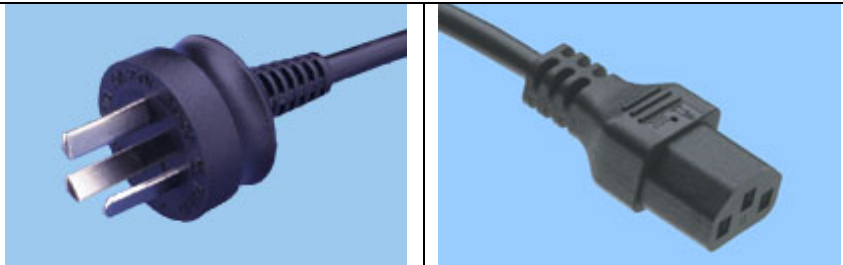
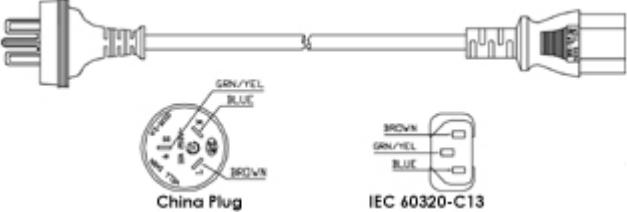
Part Number	86517040
Contact Telephone Number	44 (0) 1908 327700
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C13
Supply End	GB 2099-1-1996
Current Rating	10 A
Voltage Rating	250 VAC
Length	2.5 meters
	
	

Table 6. Quail Electronics Chinese Cordset

Part Number	8590.098
Contact Telephone Number	011-1-800-669-8090
Vendor Website	http://www.quail.com/
Equipment End	IEC 60320 C13
Supply End	GB 2099-1-1996
Current Rating	10 A
Voltage Rating	250 VAC
Length	2.5 meters
 <p>The diagram illustrates the Quail Electronics Chinese Cordset, a 2.5-meter cable. It features a China Plug on the supply end and an IEC 60320-C13 connector on the equipment end. The wiring is color-coded: GRN/YEL (Green/Yellow) for ground, BLUE for neutral, and BROWN for line. The China Plug is shown with its internal wiring connections, and the IEC 60320-C13 connector is shown with its terminal block connections.</p>	

3.4 United Kingdom Power Supply Cordsets

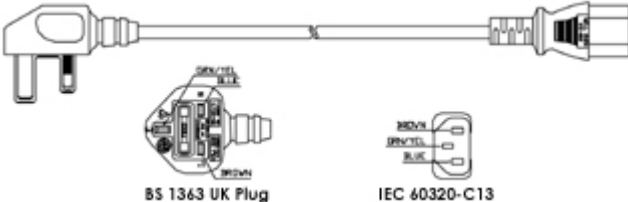
Table 7. Interpower Corporation United Kingdom Cordset

Part Number	86240080
Contact Telephone Number	44 (0) 1908 327700
Vendor Website	http://www.interpower.com/
Equipment End	IEC 60320 C13
Supply End	U.K. Plug BS 1363
Current Rating	10 A
Voltage Rating	250 VAC
Length	3.5 meters

Technical drawing of the Interpower Corporation United Kingdom Cordset. The drawing shows the cordset with dimensions: 83.9 mm for the main cord length, 18.8 mm for the plug body height, 41.4 mm for the plug body width, 56.7 mm for the IEC connector length, and 15.8 mm for the IEC connector width. A cross-section of the plug shows a 49 mm wide internal cavity with a 13-amp fuse. The IEC connector is shown with dimensions: 24.9 mm for the top width, 22.9 mm for the bottom width, and 19 mm for the height. The plug contains a 13-amp fuse.

Two photographs of the United Kingdom Power Supply Cordset. The left photograph shows the BS 1363 plug, which is a black plastic plug with three silver-colored pins. The right photograph shows the IEC 60320 C13 connector, which is a black plastic connector with two silver-colored pins.

Table 8. Quail Electronics United Kingdom Cordset

Part Number	9650.098
Contact Telephone Number	011-1-800-669-8090
Vendor Website	http://www.quail.com/
Equipment End	IEC 60320 C13
Supply End	U.K. Plug BS 1363
Current Rating	10A
Voltage Rating	250VAC
Length	2.5 meters
 <p>BS 1363 UK Plug</p> <p>IEC 60320-C13</p>	